

National Lab Day (NLD) is a nationwide movement to support science, technology, engineering, and math (STEM) education in our schools by connecting teachers with STEM professionals in order to bring more hands-on, inquiry-based lab experiences to students.



During an April 2009 speech at the National Academy of Sciences, President Obama told our nation's scientists

I want to persuade you to spend time in the classroom, talking and showing young people what it is that your work can mean, and what it means to you ... I want us all to think about new and creative ways to engage young people in science and engineering, whether it's science festivals, robotics competitions, fairs that encourage young people to create and build and invent—to be makers of things, not just consumers of things.

National Lab Day Is an Answer to That Call to Action.

National Lab Day is more than just a day. National Lab Day is:

- ✓ An unprecedented effort to bring more authentic, hands-on, discovery-based lab experiences to students.
- ✓ Teachers working with community volunteers, and communities rallying around teachers.
- ✓ Scientists and other STEM-based professionals donating their time and expertise to our schools.
- ✓ An important step in creating ongoing involvement and collaborations between STEM professionals and local schools and teachers nationwide.

National Lab Day will mobilize citizens and citizen scientists to build the ongoing, long-term collaborations with schools that we need in order to improve labs and discovery-based science experiences for all students. It's all of us working together to give our children well-equipped labs and the access to professional scientists, engineers, and mathematicians who can inspire them.

How Will National Lab Day Work?

Teachers are critical to the success of National Lab Day.

NLD projects are teacher-driven. Middle level and high school science, math, technology, and computer teachers register on the National Lab Day website at www.nationallabday.org and can request funding or describe a project they would like to do in collaboration with STEM professionals. Teachers can elect to have STEM professionals work with them to

- assess current labs,
- update or refurbish lab equipment,
- conduct equipment and materials inventory,
- clean and repair equipment,
- implement hands-on projects,
- start a fund-raising effort to buy needed supplies,
- help with science fairs,
- mentor a student,
- coordinate and host field trips,
- provide internship opportunities,
- donate materials, and
- assist with lesson plans.

Projects can also center on computer or outdoor labs—anywhere where students can tinker, explore, experiment, test, and get their hands dirty and their minds engaged, and where hands-on lessons in the STEM subjects can come alive!

These are just a few ideas; many more can be found at www.nationallabday.org.

What Will Volunteers Do?

After posting their projects and requests at www.nationallabday.org, teachers will be matched with a list of local volunteers—university STEM students and faculty, scientists, engineers, professionals, and members of the community—who have also registered on the website. Volunteers will be able to browse teacher requests and will be automatically notified of any “matches” to teacher requests. Volunteers can respond to specific teacher requests or they can offer general expertise, resources, and/or assistance.

The NLD website can also connect teachers to resources, funding opportunities, and information on relevant programs and events that they need. Teachers can use the site to connect with volunteers, raise funds, and schedule face-to-face meetings and events.

What Can STEM Professionals Bring to the Classroom?

STEM professionals can inspire the next generation of scientists and innovators by showing students the excitement of discovery and their passion for their field. These professionals can also talk with students about the challenges, rewards, and promise of a career in a STEM field. Their participation is critically important to National Lab Day.

When Is National Lab Day?

This year's National Lab Day will culminate in a series of events during the first week of May 2010 for many schools. During that week innovative NLD projects at the local, regional, and national level that include strong student involvement and transcend disciplinary or school boundaries will be highlighted. NLD is more than a week. Our hope is that it will build the ongoing, long-term collaborations with schools and after school programs that we need to make high quality, hands-on STEM experiences routinely available to all students.

Who Supports National Lab Day?

National Lab Day is a partnership between federal agencies, foundations, professional societies, and other STEM-related organizations.

Key Partners



More than 200 educational, scientific, and engineering organizations—with a combined membership of 6.2 million members—also support National Lab Day. Here are a few:

- American Association of Physics Teachers •
- National Association of Biology Teachers •
- National Education Association • American Association of Colleges for Teacher Education •
- Association for Science Teacher Education •
- National Association of Geoscience Teachers •
- Computer Science Teachers Association •
- National Council of Teachers of Mathematics •
- American Institute of Chemical Engineers •
- American Mathematical Society • American Society for Microbiology • Association for Women in Science • American Institute of Aeronautics and Astronautics • American Association for the Advancement of Science •
- Association for Computing Machinery •
- American Physical Society • Association of American Geographers • American Statistical Association • American Society of Plant Biologists • American Society of Human Genetics • Biomedical Engineering Society • American Physiological Society • American Association of Anatomists • Crop Science Society of America • Soil Science Society of America • The Institute of Industrial Engineers •
- Society of Petroleum Engineers • Society for Industrial and Applied Mathematics • American Society of Agricultural and Biological Engineers • American Society for Biochemistry & Molecular Biology • Society for Mining, Metallurgy, & Exploration

Contact

Jack Hiday, Chairman
jack@nationallabday.org

Jan Cuny, Senior Director
Professional and Federal Programs
jac@nationallabday.org

Miro Sutton, Project Coordinator
miro@nationallabday.org

Samantha Israel, Project Coordinator
samantha@nationallabday.org

Website
www.nationallabday.org

NSA National
Science
Teachers
Association
1840 Wilson Boulevard
Arlington, VA 22201-3000

National Lab Day

A National Barn-Raising for Hands-On Learning

